

Tippecanoe County Drainage Board
Minutes
January 11, 2006
Regular Meeting

Those present were:

Tippecanoe County Drainage Board President Ruth Shedd, Vice President John Knochel, member KD Benson, County Surveyor Steve Murray, Drainage Board Attorney Dave Luhman, Drainage Board Engineering Consultant Dave Eichelberger from Christopher B. Burke Engineering Limited, Drainage Board Secretary Brenda Garrison and GIS Technician Shelli Muller.

Election of Officers

Board Attorney Dave Luhman accepted nominations for 2006 officers of the Tippecanoe County Drainage Board. John Knochel nominated KD Benson for President. Ruth Shedd seconded the motion. KD Benson was elected President with no objections. Ruth Shedd nominated John Knochel for Vice President. KD Benson seconded the motion. John Knochel was elected Vice President with no objections.

Approval of Minutes

John Knochel made a motion to approve the December 7, 2005 Regular Drainage Board minutes as well as the December 19, 2005 Special Drainage Board minutes as written. Ruth Shedd seconded the motion. The aforementioned minutes were approved as written.

Bridge Mill Phase 1

Tim Beyers of Vester and Associates appeared before the Board to request final approval for Bridge Mill Phase 1 Subdivision. The development site consisted of 42 lots on approximately 147 acres and located on County Road 200 North between County Roads 400 East and 500 East. Farmington Subdivision lies to the west and Northridge Subdivision lies to the north of the development site. Phase 1 would be located at the southeast corner of said site. The majority of the site drained to a proposed detention pond (Pond A), one of four which would be constructed for the development. Pond A would be constructed during Phase 1 and additional detention ponds during future phases. A portion of the site drained to an existing 18" culvert beneath County Road 200 North then south along the west side of Northridge Subdivision and into the existing facility within said Subdivision. The Northridge Subdivision overall drainage design was reviewed as previously requested by the Surveyor. Mr. Beyer stated the study indicated when the project was fully developed; runoff to County Road 200 North would be less than the present condition. A portion of the site's drainage which currently was routed to the culvert under 200 North would be routed to the north with the phasing of the proposed development. At that time he requested final approval. John Knochel clarified Northridge Subdivision was designed to handle 13.5 cfs runoff. At the completion of Bridge Mill Subdivision the runoff total would be reduced to 9 cfs. In response to KD's inquiry Mr. Beyer stated the area's present drainage would not change until the project was fully completed. Runoff would not be increased due to the proposed project's construction. In response to John Knochel's inquiry, Mr. Beyer stated less runoff occurred from a grassed yard than an agricultural field. Mr. Beyer stated at the present condition the culvert would overtop the road in a 100 year event. After the development was completed the runoff should stay within the culvert and not overtop the road.

Randall Sly (Lot 21- Northridge Subdivision) 54 Steeple Chase Court approached the Board. He stated the Northridge Subdivision retention pond was mostly located on his lot. Mr. Sly asked if the cfs would increase at any time during the interim of phases. He stated the existing pond was located behind his home and during heavy rains he has witnessed the drainage "gushing" down the side of the hill to the pond. He was concerned that the drainage would be increased during the interim of the planned phases. Mr. Beyer stated there would be no drainage increase caused by the development. In response to his inquiry, the Surveyor reviewed the process of development submissions and the ordinance pertaining to. He stated when the Northridge Subdivision was designed less detail information was available due to new technology (GIS data). He stated as an example the availability of ten foot contours as opposed to two foot contours available now for drainage design studies. When the study of Northridge was completed ten foot contours indicated 13cfs runoff and using the data available now (two foot contours) indicated 15cfs runoff. As the phases were completed the cfs would be reduced to 9 cfs, meaning the amount of discharge through the culvert under County Road 200 North was below what was anticipated in the Northridge drainage designed to handle. Mr. Sly indicated the pond needed to be cleaned out and asked who was responsible. The Surveyor stated the homeowner's restricted covenants indicated the Homeowners Association or the individual lot owners were responsible for the maintenance of the existing detention pond. In response to Mr. Sly's inquiry, the Surveyor stated if swales and/or ponds were not maintained it could have a negative impact on the drainage. John Knochel stated a site visit prior to this meeting indicated the existing pond was in need of maintenance. John Houston 40 Huntington Way

Northridge Subdivision approached the Board. Mr. Houston stated his property lies south of the proposed subdivision and adjacent to the culvert under County Road 200 North. He stated while he was not opposed to developments he was opposed the use of a septic mound system. In response to his inquiry concerning runoff from the said system, the Surveyor stated due to the Phase II Clean Water Act treatment would be required. Mr. Beyer stated the septic plans had not been finalized and were required to be submitted to the State Department of Health for approval. The Surveyor stated at that time the construction plans would not be signed by the Surveyor as well as the County Highway Department before sanitary designs were indicated on the plans. The Surveyor recommended final approval with conditions as indicated on the January 5th, 2006 Burke memo in addition to the submittal of proof by calculation indicating the drainage conditions during the interim of the development's phases would not worsen. John Knochel made a motion to grant final approval of Bridge Mill Phase 1 with the conditions as stated on the Jan. 5th, 2006 Burke memo as well as the added condition of interim modeling and calculations provided to the Surveyors office. Ruth Shedd seconded the motion. Bridge Mill Phase 1 was granted final approval with conditions as stated. Note: Due to a prior appointment, Commissioner Ruth Shedd left the meeting during the discussion of the above project (Bridge Mill Phase 1)

New North Middle School

Pat Jarboe and Meredith Buyer from TBIRD Designs appeared before the Board to request *preliminary approval* for the New North Middle School. The site consisted of fifty acres and was located at the northwest corner of County Roads 50 West and 600 North. The majority of the site drained to the south into an existing culvert under County Road 600 North and the remainder drained to the east through culverts under County Road 50 West. Mr. Jarboe informed the Board Steve Ford with Scholer Corporation and Mark Deyoung with Stuart and Branigan representing the Tippecanoe County School Corporation were in attendance as well. Mr. Jarboe stated significant issues with this site were a large upstream watershed as well as a downstream conveyance along the Fred Haffner Regulated Drain which flowed through the site. The tile crossed under 600 North and through the property of Harold and Barb Webster (in attendance today) and then opened to an open ditch on their property as well. GIS was utilized for review of the route of said Regulated Drain. Mr. Jarboe stated input from the Surveyor's office as well as the consultants were utilized. The impact study to the drain was completed and submitted to the Surveyor office for their records. An overview of the drainage study for the Board which included the Cole Ditch as well as technical information of the Haffner Regulated Drain relating to the Cole ditch was given by Mr. Jarboe. He stated storage was taken into account with three separate ponds to handle the watershed on the site. The drain time of an existing 24" culvert under County Road 600 North was approximately one hundred hours versus the proposed condition time of approximately thirty six hours. The effects of the upstream properties should be entirely positive with the rerouting of the Haffner tile through the proposed pond systems. Mr. Jarboe stated in the existing condition runoff leaves the site under County Road 600 North and has overtopped the road in the past. In the proposed condition it would not overtop the road and would be maintained in the pond system. In addition, the proposed drainage design was modeled with future development of the properties in the watershed in mind. The Surveyor stated the portion of the Haffner Regulated Drain under county maintenance ran to approximately 330-360 feet below the headwall. A large ridge through the proposed site located in the southeast corner would need to be lowered in order to accommodate the new school building. The ridge dictated an emergency routing path to the east as opposed to the south in the existing condition. He then reviewed the emergency route and stated it had been studied very carefully. Other issues were the proposed project would require multiple variances such as the dry detention ponds would need to be 0.3 and 0.7 larger than the minimum of four feet allowed by ordinance. Due to the depressional storage allowable release rate requirements under predeveloped and post developed calculations for County Road 600 North would not be met, a variance would be requested as well. Since the said rate could not be met, an increase on the Haffner Regulated drain downstream was proposed. Concerning the outfall structure for Pond D, one 3x6 box culvert was proposed to handle the flow as opposed to routing the offsite flow around the site. The downstream restriction would be removed, the flow increased and under County Road 600 North the existing 24" pipe would be replaced with a larger structure. In order to store the proposed amount of water in addition to building on the site, an increase in the amount of flow variance would be warranted.

The Surveyor stated he was not recommending preliminary or final approval as there were technical issues still pending. A multiple number of meetings had taken place concerning this site and he stated two major issues were pending; the emergency overflow to the east- which would have to be approved by the Drainage Board and the County Highway Department (due to potential impact on County Road 600 North) and the release variance on the Haffner Regulated Drain (the effect it would have downstream). He stated he was most concerned about the conveyance's effect as it crossed the County Farm. He stated the post construction water quality issues were also a concern and had not been addressed to date. When Winding Creek and Coyote Crossing plans were submitted for approval a direct release was requested at that time. Due to flooding problems associated with Burnett's Creek the Board denied the request. From State Road 43 to the Battleground area a significant amount of flooding historically had occurred.

Dave Eichelberger stated the Jan. 6, 2006 Burke memorandum indicated issues which needed to be addressed and felt T-Bird Designs would address those. However a response to the memorandum had not been received to date and he could not make a recommendation until they had been addressed and submitted for a review. T-Bird was working on the issues and Dave did not feel it was ready at this time to make a recommendation. John Knochel stated he felt this should be tabled until the issues were addressed.

In response to the Surveyor's inquiry regarding the proposed emergency route, Mr. Jarboe stated since the southeast corner was the lowest point on the site the whole site would drain much easier to the east as opposed to routing the runoff to the south. Mr. Jarboe stated emergency routing to the south would impact existing structures. In routing the runoff to the south the existing swale would have to be entirely reformed as it was not presently adequate for the required Ordinance technical standards to be met. In addition the amount of pipe required could double or triple.

Barbara Webster 805 West 600 North presented photographs taken in June of 2004 which indicated overtopping of County Road 600 North and flooding of her property. She stated the culvert which was put in when the road was blacktopped was smaller than the original and felt it was not sufficient for the area's drainage. In response to the Surveyor's inquiry, Mrs. Webster stated it was the first rainfall event which she was aware of overtopping the said road. Mr. Jarboe stated the impact on the Webster's property would also be minimized if the emergency routing was to the east and added an emergency routing to the south would cause "significant detrimental impact" to the existing structures south of County Road 600 North. The floodplain of the Burnett Creek was a basis for the emergency routing to the east.

Mark Deyoung approached the Board. A local attorney representing the School Board Corporation on this project stated emergency routing to the east was due to the hopes of minimizing any impact to the south. He reiterated if emergency routing was designed to go to the south, it would not have the positive effect to the Webster property as would the proposed designed. He stated a preliminary approval from the Drainage Board would assist the School Corporation in scheduling and project cost. Cost overruns were an issue and the architects stated they need an inclination from the Board to proceed. The Surveyor reiterated he was concerned about the emergency overflow routing to the east. He reiterated due to the possible effect to County Road 600 North, the County Highway department needed to be involved as well. Mr. Deyoung agreed.

John Knochel then made a motion to table the request to a date determined by the County Surveyor. KD Benson seconded the motion. New North Middle School project was tabled to a future date to be determined by the Surveyor. KD Benson stated cooperation between all parties was appreciated. She added the Drainage Board had always worked very hard alongside the School Corporation. Once all the required information was submitted the Board looked forward to assisting the corporation with this project as well.

Hickory Ridge Phase 4

Tim Beyer with Vester and Associates appeared before the Board to request final approval for Hickory Ridge Phase 4. The site was located southwest of the intersection of County Roads 250 East and 450 South and consisted of approximately twenty-one acres. The previously approved Phase 2 detention pond would facilitate the runoff from this phase. The pond would be enlarged and a storm line extended from the project area to Phase 2 and would be installed during this phase of the overall development. The pond's outlet had been modified to serve as a Stormwater quality measure for this phase as well as previously approved phases. The majority of the back yards and other grassed area continue to drain to the south and met the Stormwater Ordinance exemption requirements. Such that the ten year developed run off rate was less than the two year predeveloped and one hundred year developed was less than the ten year predeveloped rates. Tim stated phases two and three had not been final platted to date. The Surveyor stated the maintenance access easement was required and should be indicated in a covenant as well as the plans. A variance was requested for the emergency overflow path from the required thirty feet width to twenty-two and one half feet width. The Surveyor stated he recommended the variance as requested.

John Knochel made a motion to approve the variance request of the emergency overflow path width to the twenty-two and one half feet. KD Benson seconded the motion. The variance was approved as requested. The Surveyor then recommended final approval with the condition as stated on the January 3, 2006 Burke memo. John Knochel made a motion to grant final approval for Hickory Ridge Phase 4 with the conditions as stated on the January 3, 2006 Burke memo. KD Benson seconded the motion. Hickory Ridge Phase 4 was granted final approval with the conditions as stated on the January 3, 2006 Burke memo.

Steak N Shake Promenade Parkway

James Shinneman representing Weihe Engineers appeared before the Board to request final approval for Steak N Shake Promenade Parkway. The site was located at the southwest corner of County Road 350 South and County Road 250 East

(Concord Road) and considered to be "Block one" at Concord Plaza. The site's runoff would be conveyed south through storm sewers to a main system which was being constructed with the new Wal Mart supercenter and discharged to a detention facility constructed with said supercenter project. The conditions listed on the January 3, 2006 Burke memo had been met. The Surveyor then recommended final approval with the condition as stated on the January 3, 2006 Burke memo for Steak N Shake Promenade Parkway.

John Knochel made a motion to grant final approval with conditions as stated on the January 3, 2006 Burke memo. KD Benson seconded the motion. Steak N Shake Promenade Parkway was granted final approval with the conditions as stated on the January 3, 2006 Burke memo.

Other Business

The Surveyor presented a proposed list of meeting dates for 2006. KD Benson stated she had a conflict with the March date. The Surveyor had a conflict with the February date. Therefore the February date was changed to 9 a.m. on February 2, 2006. The March date was changed to March 8, 2006 at 10 a.m.

Steve Murray

The Surveyor presented Maintenance Bond # 1750818 for Butler Meadows Phase One dated July 22, 2005 from Atlas Excavating written by Hanover Insurance and in the amount of \$13055.00 and recommended acceptance by the Board. John Knochel made a motion to accept Maintenance Bond # 1750818 for Butler Meadows Phase One dated July 22, 2005 from Atlas Excavating written by Hanover Insurance and in the amount of \$13055.00. KD Benson seconded the motion. Maintenance Bond # 1750818 for Butler Meadows Phase One dated July 22, 2005 from Atlas Excavating written by Hanover Insurance and in the amount of \$13055.00 was accepted as presented.

2005 Regulated Drain Maintenance Report

The Surveyor noted a 2005 Drain Maintenance Report was available for the Board's review. He stated he would present an active and inactive list to the Board as time allowed, hopefully at the February meeting.

Public Comment

As there was no public comment, John Knochel made a motion adjourn. KD Benson seconded the motion. The meeting was adjourned.

KD Benson, President

John Knochel, Vice President

Brenda Garrison, Secretary

Ruth Shedd, Member